



Chemical and Environmental Measurement Information
Recra LabNet Philadelphia
Analytical Report

Client: TNU-HANFORD B99-078
RFW #: 9909L129
SDG/SAF #: H0534/B99-078

W.O. #: 10985-001-001-9999-00
Date Received: 09-17-99

GC/MS VOLATILE

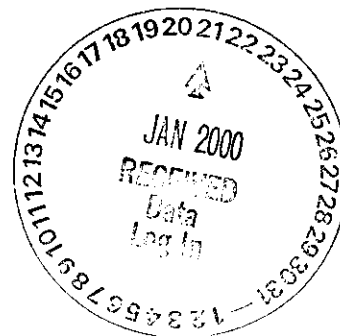
RECEIVED
FEB 28 2000

Four (4) soil samples were collected on 09-14-99.

The samples and their associated QC samples were analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8260A for TCL Volatile target compounds on 09-23-99. **EDMC**

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. The cooler temperature upon receipt has been recorded on the chain-of-custody.
2. The required holding time for analysis was met.
3. Non-target compounds were not detected in the samples.
4. All surrogate recoveries were within EPA QC limits.
5. Matrix spike analyses for SDG H0534 were performed on RFW# 9909L127, sample ID-B0WBR7.
6. The method blank contained the common laboratory contaminant Methylene Chloride and the target compound 2-Butanone at levels less than the CRQL.



A handwritten signature in black ink, appearing to read 'J. Michael Taylor'.

J. Michael Taylor
Vice President

Philadelphia Analytical Laboratory

son\group\data\voa\tnu09129.doc

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 12 pages.

01-18-00

Date

GLOSSARY OF VOA DATA

DATA QUALIFIERS

U	=	Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
J	=	Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
B	=	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
E	=	Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
D	=	Identifies all compounds identified in an analysis at a secondary dilution factor.
I	=	Interference.
NQ	=	Result qualitatively confirmed but not able to quantify.
N	=	Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
X	=	This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
Y	=	Additional qualifiers used as required are explained in the case narrative.



GLOSSARY OF VOA DATA

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	=	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Suffix added to sample number to indicate that results are from a diluted analysis.
NA	=	Not Applicable.
DF	=	Dilution Factor.
NR	=	Not Required.
SP, Z	=	Indicates Spiked Compound.



Cust ID: BOWBR0 BOWBR1 BOWBR2 BOWBR4 VBLKSQ

RFW#: 001 002 003 004 99LVH366-MB1

Chlorobenzene	6 U	6 U	5 U	5 U	5 U
Ethylbenzene	6 U	6 U	5 U	5 U	5 U
Styrene	6 U	6 U	5 U	5 U	5 U
Xylene (total)	6 U	6 U	5 U	5 U	5 U

*= Outside of EPA CLP QC limits.

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOWBRO

Lab Name: Recra.LabNet

Contract: 10985001001

Lab Code: Recra

Case No.: _____

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: 9909L129-001

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: h092308

Level: (low/med) LOW

Date Received: 09/17/99

% Moisture: not dec. 9

Date Analyzed: 09/23/99

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76131	ETHANE, 1,1,2-TRICHLORO-1,2,	9.081	10	NJ

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOWBR1

Lab Name: Recra, LabNet

Contract: 10985001001

Lab Code: Recra

Case No.: _____

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: 9909L129-002

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: h092309

Level: (low/med) LOW

Date Received: 09/17/99

% Moisture: not dec. 7

Date Analyzed: 09/23/99

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76131	ETHANE, 1,1,2-TRICHLORO-1,2,	9.080	10	NJ

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0WBR2

Lab Name: Recra.LabNet Contract: 10985001001

Lab Code: Recra Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 9909L129-003

Sample wt/vol: 5.20 (g/mL) G Lab File ID: h092310

Level: (low/med) LOW Date Received: 09/17/99

% Moisture: not dec. 3 Date Analyzed: 09/23/99

Column: (pack/cap) CAP Dilution Factor: 0.962

Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76131	ETHANE, 1,1,2-TRICHLORO-1,2,	9.070	10	NJ

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOWBR4

Lab Name: Recra.LabNet

Contract: 10985001001

Lab Code: Recra

Case No.: _____

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: 9909L129-004

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: h092311

Level: (low/med) LOW

Date Received: 09/17/99

% Moisture: not dec. 2

Date Analyzed: 09/23/99

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76131	ETHANE, 1,1,2-TRICHLORO-1,2,	9.070	20	NJ

Recra LabNet - Lionville Laboratory
VOA ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD B99-078

DATE RECEIVED: 09/17/99

RFW LOT # :9909L129

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOWBR0	001	S	99LVH366	09/14/99	N/A	09/23/99
BOWBR1	002	S	99LVH366	09/14/99	N/A	09/23/99
BOWBR2	003	S	99LVH366	09/14/99	N/A	09/23/99
BOWBR4	004	S	99LVH366	09/14/99	N/A	09/23/99

LAB QC:

VBLKSQ	MB1	S	99LVH366	N/A	N/A	09/23/99
--------	-----	---	----------	-----	-----	----------

10-22-99

[illegible]